SECRETARÍA DE ENERGÍA



U.S. DEPARTMENT OF ENERGY



U.S. -- Mexico LPG Workshop November 6 &7, 2003, Mexico City Speaker Biographies

Enrique Arizmendi, ASOCIMEX

Francisco J. Barnés, Secretaría de Energía

For the Mexican Ministry of Energy, Mr. Barnés has served as the Under Secretary for Hydrocarbons since 2003; and prior to, he served as the Under Secretary for Energy Policy and Technological Development. He was General Director of the Mexican Petroleum Institute from 1995-1996. For the Ministry of Mines, Energy and State Industries, Mr. Barnes held a variety of positions, including Technical Director of the Mexican Petrochemical Commission; General Director of State Chemical and Petrochemical Industries. Mr. Barnés has served as the president or vice-president of the board of the following companies: Sosa Texcoco, Cloro Tehuantepec, Polimar, Mexaro, Finacril, Adhesivos Mexicanos, Vitrium, Proquivemex; Member of the board of Tereftalatos Mexicanos, Tetraetilo de Mexico, Glicoles Mexicanos, Cibiosa, Reactivos Minerales Mexicanos, Mexican Petroleum Institute, National Laboratory for Industrial Development.

In academia, Mr. Barnés has been a full time professor in the School of Chemistry at the National Autonomous University of Mexico (UNAM) since 1973 (currently on leave of absence). He served the university in many administrative positions, including the Rector; Secretary General (Senior Academic Vice-president); Dean of the School of Chemistry; Head of the Science and Technology Division, ENEP Zaragoza; and Secretary General of the School of Chemistry. At the Pacific Northwest National Laboratory, he was a visiting Scholar from 2000-2000.

In industry, Mr. Barnes was Co-founder and Technical Director of PYCORSA, an engineering firm; Director of Technology Planning of ALFA Industries, Petrochemical Sector; and Technical Director of Foment Industrial SOMEX, Petrochemical Division.

Outside of work, Mr. Barnes has served as the National President of the Mexican Institute of Chemical Engineers, the President of Mexico City chapter of the Mexican Chemical Society; President of the National College of Chemical Engineers and Chemists; a member to the Joint Public Advisory Committee of the North American Commission for Environmental Cooperation; Vice-president of the Latin American Union of Universities for Mexico and Caribbean Region; and currently the Vice-president of ICA Foundation.

Mr. Barnes has received several awards and distinctions, including recognitions form the Banco Nacional de Mexico; Celanese Mexicana; Mexican Chemical Society; National Institute of Astrophysics, Optic and Electronic; Mexican Institute of Chemical Engineers. Mr. Barnés received a B.S. in Chemical Engineering from the National Autonomous University of Mexico and a M.S. and Ph.D in Chemical Engineering from this University of California at Berkeley.

J. J. Brown, United States Senator Orrin G. Hatch (R-UT)

J.J. Brown received a B.A. in Political Science and a M.A. in Public Policy from Brigham Young University (Provo, Utah) in 1993. Following his education, he completed a short stint as a congressional intern for Senator Conrad Burns (R-MT) and moved directly from there to the staff of U.S. Senator Orrin G. Hatch in 1994. As a Legislative Assistant, J.J. advises Senator Hatch on agriculture, energy, environment, and public land issues. He is also Senator Hatch's advisor on the CLEAR ACT (which stands for Clean Efficient Automobiles Resulting from Advanced Car Technologies.) It is the most comprehensive legislation ever considered by the U.S. Congress to promote the use of alternative fuel vehicles and alternative fuels.

Senator Hatch's bill is currently part of the omnibus energy bill passed by the U.S. Senate.

J.J. has worked with Senator Hatch for about 10 years. He and his wife Ann have five children ranging in age from 1 to 12 years.

Nancy Checklick, SAIC

Ms. Checklick is a Lead Environmental Analyst with Science Applications International Corporation (SAIC). She has spent the over past 3 years at SAIC consulting on climate change and transportation issues for various government clients. Ms. Checklick holds extensive research and information analysis, and data management expertise in the climate change field, specifically noting greenhouse gases and alternative fuel transportation. Her work includes calculation of emissions estimates for national-level greenhouse gas inventories and support to the Voluntary Reporting of Greenhouse Gases (1605b) Program. She has been published as a contributing author for many U.S. Government publications, such as, *Emissions of Greenhouse Gases in the United States* (Energy Information Administration, various years); and manuals on greenhouse gas reductions from alternative fueled vehicles (National Energy Technology Laboratory, various years).

Ms. Checklick's work in international development supports the U.S. Department of Energy Clean Cities International program and the U.S. Agency for International Development (USAID). She assists Clean Cities International in building multi-stakeholder coalitions for clean transportation strategies and program development. She organizes foreign delegations to the U.S. to gain knowledge about alternative fuel vehicle technology; and U.S. delegations to foreign countries to initiate capacity building with government officials and technology transfer with U.S. companies. Ms. Checklick also supports the USAID New Delhi Mission in the "Clean Air/Clean Fuels" project promoting the use of alternative fuels in transportation in India.

Prior to SAIC, Ms. Checklick consulted to USAID's Office of Energy,

Environment and Technology and the Global Climate Change Team. Ms. Checklick began her career in the environment when accepted into the competitive internship program at the U.S. Department of State, Bureau of Oceans & International Environmental and Scientific Affairs, in Washington, DC. Ms. Checklick obtained a bachelor of the arts degree with a major in International Affairs from The George Washington University in Washington, DC. She currently resides in the suburbs of Northern Virginia.

Nicole Davis, University of California at Riverside

Nicole Davis is a developmental engineer with the University of California, Riverside, and Center for Environmental Research and Technology (CE-CERT), under the direction of Dr. James Lents. For the past seven years, Ms. Davis has been responsible for analyzing emissions, activity, and inventory data for the Environmental Policy Group at CE-CERT. Her primary focus has been on the collection, processing and analysis of vehicle activity and emissions data from the US and locations around the world, and the implementation of this data in the International Vehicle Emissions (IVE) model. She is also involved in analyzing various policy scenarios for feasibility and emission benefits, estimating emissions from alternative fueled on and off-road vehicles and distributed generation units, and modeling dispersion from point and area sources. In recent years, Nicole has been involved in research with the California Air Resources Board, California Energy Commission, Energy Foundation, United States Department of Energy, United States Environmental Protection Agency, Western Governors' Association, and Government of Chile. Her international research has included environmental improvement projects in Africa, India, Asia, and South America.

She received her Bachelor's Degree in Environmental Engineering in 1998 and Master's Degree in Chemical and Environmental Engineering in 2001, both from the University of California, Riverside.

Mark Delucchi, University of California at Davis

Dr. Mark A. Delucchi is a research scientist at the Institute of Transportation Studies, University of California, Davis (ITS-Davis), and a private consultant, specializing in economic, environmental, and engineering analyses of transportation systems and alternative transportation fuels. He has worked on projects for the U. S. Deparment of Energy, the U. S. Environmental Protection Agency, the World Bank, the International Energy Agency, Oak Ridge National Laboratory, the Federal Highway Administration, the California Air Resources Board, and a number of other private firms, nonprofit organizations, and and government agencies. He is a member of the Alternative Fuel Committee and the Energy Committee of the Transportation Research Board of the National Research Council.

Delucchi¹s research is in four main areas. The research is documented in reports published by ITS-Davis and summarized in articles in the peer-reviewed literature.

- i) Comprehensive analyses of the full social-costs of motor-vehicle use. This research quantifies the dollar value of many of the external costs of motor-vehicle use, including air pollution and water pollution, climate change, and energy use. It features damage-function models for many of the major environmental impacts of motor-vehicle usewith particular attention to impacts on human health, crops, visibility, noise, and global climate. This is widely regarded as the most detailed and comprehensive social-cost analysis in the U. S. in the past 25 years.
- ii) Detailed lifecycle analyses of emissions of greenhouse gases and criteria pollutants. The Lifecycle Emissions Model (LEM) includes the use of transportation fuels (including a wide range of alternative vehicles and fuels), transportation modes (light-duty vehicles, heavy-duty vehicles, off-road vehicles, buses, light rail, heavy rail, bicycles), major materials (such as steel, aluminum, and plastics), electricity generation and use, and fuels for heating and cooking. The LEM and the reports generated from it have been used by the U. S. Energy Information Administration, the National Research Council, the

Intergovernmental Panel on Climate Change, the Canadian government, and the White House ³Car Talk² advisory Committee.

- iii) Systems analyses of energy, economic, and air-quality impacts of transportation fuels and technologies. These system analyses cover alternative-fuel vehicles, buses, rail transit systems, and ³smart² highways. These multi-modal environmental impact and energy-use models can be adapted to assist in the analysis of the environmental and energy costs of transportation modes. This research area also includes a novel proposal for a new town-plan/transportation infrastructure design that can significantly reduce pollution, congestion, and accidents from transportation without requiring people to drive less or give up suburban living.
- iv) Modeling of the energy use and lifecycle cost of electric and alternative-fuel vehicles. This model includes a complete second-by-second energy-use simulation, a complete accounting of manufacturing cost, and detailed treatment of all costs over the life of vehicles (battery EVs, fuel-cell EVs, gasoline vehicles, and alternative-fuel vehicles). It simultaneously designs a vehicle to exactly satisfy a particular emission and calculates the lifecycle cost of the designed vehicle. It is one of the most detailed hybrid energy-use, manufacturing cost, and lifecycle cost models of its kind.

Curtis Donaldson, Clean Fueling Technologies

Curtis Donaldson founded Clean Fueling Technologies (CFT), located in Georgetown, Texas, in 1993 to provide propane fuel infrastructure equipment that makes the refueling process transparent to the end user – allowing users to access propane fuel pumps in a "station environment" that is identical to the standard gasoline station. CFT has customers in more than 23 countries and celebrated their 10th anniversary in April.

CFT was the catalyst behind the launch of CleanFUEL USA in 1999. The mission of CleanFUEL USA is to provide easy-to-operate propane fuel stations with 24-hour access in metropolitan areas nationwide.

CleanFUEL USA began as a partnership between CFT and Amerigas, one of the leading propane marketers in the country. Since its inception, CleanFUEL USA has continued to grow, adding new propane industry partners. CleanFUEL USA now operates propane stations in Denver, Phoenix, Central California, and in two National Parks – Glacier and Yellowstone. The CleanFUEL USA network will expand to include four more cities this year.

Having served as President & CEO of CFT for the past ten years, Curtis now serves as CEO, and also serves as the Managing Director of CleanFUEL USA. His professional experience also includes having served as President of ProCon, a membership association formed to expedite the commercialization of certified low emission propane conversion kits and vehicles. In 2002, Curtis was appointed to a three-year term on the Propane Education and Research Council (PERC) as a public member. Recently he was elected as Secretary/Treasurer for the National Ethanol Vehicle Coalition (NEVC) Board of Directors and was awarded the National AFV Hero Award from the U.S. Department of Energy at the Annual Clean Cities Conference.

Curtis began his career with Conoco in 1982 in Midland, Texas where he served in various capacities including oil & gas accounting, production analysis, gas processing, propane marketing, and as coordinator of alternative fuels marketing. He worked in several Conoco offices including Maljamar, NM; Midland and San Angelo, TX; and Conoco World Headquarters in Houston, TX. Curtis graduated from Texas A&M in 1981 with a BBA in Business Management. He served in the Texas Army National Guard from 1982 thru 1991 holding various positions including Battery Commander, and ended his military career as a Captain in Field Artillery.

Curtis is married to Teresa Dugger and they have four children: Elizabeth (14); Rachel (10); Caroline (5); and Garrett (4). Curtis' interests include teaching youth Sunday School, coordinating the youth basketball league in his community of Salado, Texas, chairing the annual Holiday Basketball Tournament and spending time with his family.

Brian Feehan, Propane Vehicle Council

Mr. Feehan returned to the United States last year after spending the past several years in France as the Projects Director for the World LP Gas Association and is now serving as the Executive Director of the Propane Vehicle Council (PVC) in Washington, DC. The PVC is the national organization representing the propane motor fuel interests in the US.

Mr. Feehan joined the World LP Gas Association (WLPGA), based in Paris, in 1998 after more than 10 years of experience in government relations and marketing. As Projects Director for the WLPGA he developed marketing tools and implemented strategies promoting the use of LP Gas worldwide. Mr. Feehan also represented the WLPGA on several key United Nations organizations while strengthening partnerships with many national and international agencies and associations. In addition, he increased the communications outreach and visibility of the WLPGA through building partnerships with industry stakeholders and the development of the Global Autogas Industry Network (GAIN). GAIN is the worldwide network within the WLPGA that promotes the use propane as a motor fuel.

Mr. Feehan holds a Masters Degree in Public Administration and a BA in Political Science from George Mason University in Virginia.

Brad Garner, IMPCO

Currently Vice President and Chief Operating Officer, Americas, Asia/Pacific Operations, Mr. Brad Garner joined IMPCO in 1994. He has held various positions with the company including General Manager and Director of the Gaseous Fuel Products Division, General Manager of the Industrial Engines Business Unit, Engineering Manager and Regional Sales Manager.

Prior to joining IMPCO, Mr. Garner was with Superior Propane Inc., an international Canadian energy company with sales over \$1 billion where he held the position of Senior Sales & Technical Manager. Prior to Superior Propane Inc., Mr. Garner was the owner and operator of Advanced Automotive Technology, one of the largest alternative fuel vehicle conversion centers in Canada. Mr. Garner is a graduate of Fanshawe College of Technology in Canada.

Luis Manuel Guerra, Autonomous Institute for Environmental Research (INAINE)

Luis Manuel Guerra is founder and president of the Autonomous Institute for Environmental Research, (INAINE) in Mexico, (1985). Mr. Guerra is a member of the Board of the Climate Institute, of the International Institute for Energy Conservation (IIEC) and of Appropriate Technology International (ATI) of Washington, D.C. and of the Center of Environmental Information and Communication of North America (CICEANA) and the Mexican Institute for Renewable Resources (IMERNAR). He is president of the Communications Division of the Mexican Society for Environmental Quality, Chapter of Air & Waste Management Association of the United States. He is a founding member of the National Council for Sustainable Development in Mexico; a founding member of the Mexican Chapter of the World Future Society; and a founding member of the Mexican section of the "Leadership Development Program" (LEAD) of the Rockefeller Foundation (1990). He is also the founder of the Mexican Association of Environmental Journalists (1995).

Mr. Guerra writes for the Mexico-City daily "Reforma" and for specialized magazines like "Teorema", "Origina", "MedCom", "Millenium" and "Four Wheels." He has published several specialized books on the environment, being his last book "Our daily air give us..." (De. Diana, Mexico, 1995) Mr. Guerra won the prize "Alexander voun Humboldt" for his philanthropic and environmental activities (1996). He participated in the UN World Conferences "Earth Summit" in Rio de Janeiro in 1992, on World Population in Cairo in 1994 and "Habitat II"

in Istambul in 1996.

Mr. Guerra obtained a degree in Chemistry from the National University in Mexico, (1978). He did research in solid-state Chemistry in the Mexican Institute for non-Renewable Resources, (1974-1978). He worked for Merck-Mexico, heading the R & D department for new products (1978-1982) and as director of Marketing (1982-1986). As a fellow of the Carl Duisberg Society in Berlin, Germany, he specialized in the management of hazardous wastes, (1987-1988). He was a fellow of the Ashoka Foundation of Washington, D.C. (1987-1992). He obtained a degree in Health Promotion by the Mexican Institute of Social Security, (1993).

Dan Kelly, Texas State Railroad Commission

Dan Kelly started the Railroad Commission of Texas' Alternative Fuels Research & Education Division in 1991. As director, he is responsible for all LPG-related research and development, technical training, educational and marketing activities of Texas' chief energy agency. He also serves on the advisory board of the Texas Emissions Reduction Plan and on the Research & Development Advisory Committee of the national Propane Education and Research Council. Before coming to the Railroad Commission, Mr. Kelly directed the Consumer Services Division of the Texas Department of Agriculture; edited the Texas Comptroller of Public Accounts' award-winning economic newsletter, Fiscal Notes; and analyzed natural resources policy for the Texas Comptroller and the Texas House of Representatives. A former academic, he taught for 17 years at the Lyndon B. Johnson School of Public Affairs, the University of Texas at Austin, the University of South Carolina, and Rice University. He holds a doctorate in medieval literature from Princeton University and a bachelor's degree in English from the University of California at Berkeley.

He has been married since 1972 to Gay Fay, an artist and painter. They live in Austin, Texas, with their daughters Maria Suzanne, 14, and Anna Cathleen, 13, and a large number of animals, computers and musical

instruments.

Tania Mijares, Centro Mexicano de Derecho Ambiental (CEMDA)

Marcy Rood, U.S. DOE

Ms. Rood began working for the Clean Cities Program at the U.S. Department of Energy in Washington, D.C. in January 1995. Her current responsibilities as Deputy Director include the management of Clean Cities International—a program devoted to bringing safe and effective alternative fuel vehicle programs to the developing world, the National Clean Cities Conference and the "Advancing the AFV Choice" effort. She also provides direction for grant programs, including grants to state energy offices to accelerate the introduction and expand the use of alternative transportation fuels in local Clean Cities. Ms. Rood leads the Clean Cities International program which now has activity in seven countries. She also serves as the liaison to the European Commission on clean urban transport programs. Special projects included planning for the Alternative Fuels Day and Environmental Summit for New York City and working with the U.S. Environmental Protection Agency on implementing the Voluntary Mobile Source Emission Reduction Program for alternative fuel vehicles. She has also served as the Clean Cities manager of the EV-Ready Market Launch initiative, sponsored by the Departments of Energy and Transportation, and the electric industry.

Prior to her work for the Department, she was a staff member to Congressman Ted Strickland, 6th District of Ohio. In 1987 she began her career in the energy efficiency field as a manager at the Ohio Department of Development, Office of Energy Efficiency. She was charged with developing and implementing energy efficiency programs in the residential and commercial sectors. She led the development process for the Home Energy Rating System pilot for the State of Ohio and managed the Ohio Community Foundations Partnership Program.

She is a native Ohioan and has a Masters of Public Administration from the Ohio State University.

Dr. Lee Schipper, EMBARQ

Dr. Lee Schipper is currently Co-Director of EMBARQ, the Center for Transport and Environment at the World Resources Institute in Washington, D.C. EMBARQ is a new program whose initial funding was provided by the Shell Foundation. The mission of EMBARQ is to act as a catalyst for socially, financially, and environmentally sound solutions to the problems of urban transport. EMBARQ has a unique position as the convener of key stakeholders to bring solutions to urban mobility and pollution problems in major cities in the developing world. EMBARQ's first partnership with Mexico City brings its own resources and those of the World Bank to one of the most challenging cities, using the resources of government, vehicle companies, NGOs, and others to both create changes in policies and technologies and establish patterns of sustainable governance to meet the challenges of sustainable transport. Currently EMBARQ is negotiating with foundations, governmental authorities, and private companies to support similar partnerships in other major cities of the developing world.

Before coming to EMBARQ in April 2002, Dr. Schipper was a guest researcher in Group Planning at Shell International Ltd, London. Dr. Schipper also worked for Shell's Group Planning in the 1980s. In the fall of 2001 he retired from his six year stint as Senior Scientist at the International Energy Agency, Paris and was on leave from his post as a Staff Senior Scientist at the Lawrence Berkeley National Laboratory (LBNL), University of California, Berkeley, from which he also retired in 2001 after serving 24 years.

Dr. Schipper has authored over 100 technical papers and a number of books on energy economics, energy use and energy conservation, and transportation around the world. Flexing the Link (http://www.iea.org/pubs/free/articles/schipper/flexing.htm) was written for the World Bank to set out the relationship between carbon emissions and other problems of transport. Dr. Schipper convened a seminal meeting at the World Bank to tie together many strains of urban

transport problems (see http://www.back-to-work.com/clearingtheair.html). He led an IEA effort to understand the transport / CO2 policies of six member countries (Road from Kyoto, http://www.iea.org/public/studies/kyoto.htm). Finally, he is a co-author of the IEA's recent book on urban transport, Bus Systems for the Future.

Dr. Schipper is also a member of Global Business Network and a Senior Associate of Cambridge Energy Research Associates. He has taken part in numerous prestigious international panels and studies on energy, district heating, housing, and on transportation, some of which form the subject of his talk at IVA. He is currently a member of the US Transportation Research Board's Committee on Sustainable Transport, and on a number of editorial boards of important transport and energy publications. He has been a Fellow at the Industry and Energy Department of the World Bank. He was Information Specialist at the Energy and Resources Group, University of California, Berkeley, from 1974 to 1977, and is an Associated Faculty with that Group. He obtained his BA in Music from Berkeley in 1968 and his Ph.D. in Astrophysics in 1985. He speaks several European languages, having lived in Sweden, France, and the UK for a total of over 10 years. He still leads a jazz quintet from time to time, and recorded "the Phunky Physicist" in Sweden in 1973 with Janne Schaffer and the American trumpeter Ted Curson.